

REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold font.

Claims 1-13, 15-17, and 23-24 are rejected under 35 U. S. C. 103(a) as obvious over. Broekhuijsen (Pat. No. 573 1820) and/or the article to Bartels et al. "A Technique for the Direct Manipulation of Splines Curves" in view of Ahlquist, Jr., Pat. No. 6459439.

Considering claim 1, Broekhuijsen discloses most claimed features of the invention as set forth most in the previous action, paper no. 13. See also the Bartels et al. article at pages 33-39. Broekhuijsen and/or Bartels, however, fails to teach the step of "determining new positions for canonical locations on the Bezier shape based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations along the Bezier shape being predefined".

Ahlquist, Jr. in a similar art teaches the concept equivalent to determining (e.g., by means of a computer processor via pulling tool 23) new positions for canonical locations (e. g., segment locations along the path between points 13 and 14, see fig. 2A-H) on the Bezier shape (e. g., path 10 of fig. 1) based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations on the Bezier shape being predefined. See col. 5, lines 10-65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Broekhuijsen and/or Bartels to include the step of determining new position for predefined canonical locations along a Bezier shape, as taught by Ahlquist, Jr.; in order to allow the user to reshape or modify any part or area of the path. See Ahlquist, Jr. col. 3, lines 65-67.

The applicant disagrees. Claim 1 has been amended to clarify that "the Bezier shape that is governed by the re-determined control points [has] a path that is not dependent on any user-specified information other than the user-specified change in position."

By contrast, the method used by Ahlquist to re-define the Bezier shape depends on two user-specified items: a user selected central location (e.g., location 21a in Figs. 2A, 2C, and 2E) and a user-specified length (e.g., the length specified in Figs. 2B, 2D, and 2F): "the endpoints, 22a and 22b, are not selected by the user, but rather are selected by the tool based on the length set in FIG. 2B and the user selected central location 21a. As the user pulls the path 10 at location

21a out to 21b, the action taken by the pull tool is to move a segment of the path represented by the length between 22a and 22b" (emphasis added, col. 5, lines 20-24).

In his action of October 6, 2003, the examiner has acknowledged that Ahlquist's relocated curve is determined by two user inputs:

The Examiner, in response, respectfully disagrees. Ahlquist, at col. 3, lines 9-35, suggests that a user can select any specific place on the Bezier spline and pulls the place to a desired location on the Bezier spline. And, as the user moves or pulls the specific place or location (e.g., location 21a, fig. 2b), new locations or positions (e. g. locations 22a and 22b) along the path of the Bezier shape are determined based on the user selected location. See fig. 2b. [Canonical] locations 22a and 22b are adjusted by pull tool 23 based on the user input in fig. 2b. See col. 5, lines 25-38.

Because Ahlquist relies on two user inputs, the relocation information and the length parameter, Ahlquist did not anticipate and would not have made obvious "a path that is not dependent on any user-specified information other than the user-specified change in position," as in the applicant's amended claim 1.

Claim 1 has also been amended to clarify that the positions of the canonical locations are "predefined to divide the Bezier shape into sections of predetermined proportions such that a particular one of the canonical locations at least sometimes has two different predefined behaviors, with respect to the user-specified change in position, when the user-specified arbitrary target location is, respectively, in different sections of the shape."

By contrast, the method used by Ahlquist does not suggest predefining the positions of any particular points along his Bezier spline to divide the shape into sections. In Ahlquist, "each location on the segment is moved according to a predetermined curve or formula, based upon the distance that each location is from the selected location 21a" (Col. 5, lines 26-29).

Ahlquist's shape shown in Figs. 2A, 2C, and 2E can be defined as the segment between 13 and 14 or the segment between 22a and 22b. If one defines the shape as the segment between 13 and 14, then the behaviors of the canonical locations are not "predefined" with respect to the user-specified change in position as stated in claim 1, because the same user-specified change in position produces different behaviors in different circumstances. For example, the same user-specified change in position relocates point 21a to point 21b in Figs. 2A and 2C. In order for

new positions of the canonical locations to be based on "predefined behaviors of the canonical locations with respect to the user-specified change in position," the newly defined positions of the canonical locations should be consistent between the two figures. As seen in Figs. 2A and 2C the new locations of the points between 22a and 22b are not consistent, thus, a canonical location as defined in claim 1 cannot be that one lies between 22a and 22b. But, if one contends that Ahlquist's canonical locations are located between points 22a and 13 or 22b and 14 no change in position of the canonical location is produced by the user-specified change in position. If there is no change in the position of the canonical locations and the control points are "determined based on the new positions of the canonical locations," the re-determined control points would be the same as the original control points. Since the Bezier shape is "governed by control points" the Bezier shape would also remain unchanged. Because the Bezier shape is changed in Figs. 2A and 2C the idea that the canonical locations lie between 22a and 13 or 22b and 14 is not consistent with the figures. Thus, while a canonical location placed between 22a and 13 or 22b and 14 could be construed as having a "predefined behavior" this explanation is not consistent with the other limitations of claim 1. Thus, if one defines the shape as the segment between 13 and 14, then the behaviors of the canonical locations are not "predefined" as stated in claim 1.

Conversely, if one defines the shape as the segment between 22a and 22b, the segment will not have "different predefined behaviors, with respect to the user-specified change in position, when the user-specified arbitrary target location is, respectively, in different sections of the shape" because the user-specified point, 21a, is always in the same section.

Thus, Ahlquist did not anticipate and would not have made obvious canonical locations that are "predefined to divide the Bezier shape into sections of predetermined proportions such that a particular one of the canonical locations at least sometimes has two different predefined behaviors, with respect to the user-specified change in position, when the user-specified arbitrary target location is, respectively, in different sections of the shape," as in the applicant's claim 1. Nor would Ahlquist combined with Broekhuijsen and/or Bartles have made obvious the invention of claim 1.

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Claims 2-15 contains at least in part the features of claim 1, they are rejected for at least the same reasons as claim 1.

Claims 2-15 are patentable for at least the same reasons as claim 1.

Independent claims 16-17, and 23-24 are similar to claim 1; they are similarly rejected as claim 1.

Claims 16-17, and 23-24 are patentable for at least the same reasons as claim 1.

The fact that the applicant has addressed certain positions of the examiner in this response should not be construed as a concession with respect to any other positions of the examiner. The fact that the applicants have made certain arguments for the patentability of certain claims should not be construed as a concession by the applicant that there are not other good reasons for the patentability of those claims or other claims.

The applicant asks that all claims be allowed.

Please apply any charges to deposit account 06-1050, referencing attorney docket 07844-353001.

Respectfully submitted,

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David L. Feigenbaum
Reg. No. 30,378

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906